

SAFETY DATA SHEET

	1. Product and Company Ide	
Product identifier	Ty-lon C70 (7597-05, 7597-P3, 7597-01)	
Other means of identification	Not available	
Recommended use	Cooling Water Treatment	
Recommended restrictions	None known.	
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEM	MTREC)
Supplier	See above.	
	2. Hazards Identificat	ion
Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		
Signal word	Danger May be corrosive to metals. Causes severe	skin hurns and eve damage. May damage fertility or
Hazard statement		skin burns and eye damage. May damage fertility or gans through prolonged or repeated exposure.
Precautionary statement		
Precautionary statement Prevention		athe mist or vapor. Wash thoroughly after handling. eye protection and face protection. Obtain special all safety precautions have been read and
-	Wear protective gloves, protective clothing, instructions before use. Do not handle until understood. Absorb spillage to prevent material-damage vomiting. IF ON SKIN (or hair): Take off im water. Wash contaminated clothing before keep comfortable for breathing. Immediatel	eye protection and face protection. Obtain special all safety precautions have been read and e. IF SWALLOWED: Rinse mouth. Do NOT induce mediately all contaminated clothing. Rinse skin with reuse. IF INHALED: Remove person to fresh air and y call a POISON CENTER or doctor. Specific IN EYES: Rinse cautiously with water for several at and easy to do. Continue rinsing.
Prevention	Wear protective gloves, protective clothing, instructions before use. Do not handle until understood. Absorb spillage to prevent material-damage vomiting. IF ON SKIN (or hair): Take off im water. Wash contaminated clothing before keep comfortable for breathing. Immediatel treatment (see information on this label). IF minutes. Remove contact lenses, if presen	eye protection and face protection. Obtain special all safety precautions have been read and e. IF SWALLOWED: Rinse mouth. Do NOT induce mediately all contaminated clothing. Rinse skin with reuse. IF INHALED: Remove person to fresh air and y call a POISON CENTER or doctor. Specific IN EYES: Rinse cautiously with water for several at and easy to do. Continue rinsing. ention.
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Prevention Response Storage Disposal WHMIS 2015: Health Hazard(s) not otherwise classified	Wear protective gloves, protective clothing, instructions before use. Do not handle until understood. Absorb spillage to prevent material-damage vomiting. IF ON SKIN (or hair): Take off im water. Wash contaminated clothing before keep comfortable for breathing. Immediatel treatment (see information on this label). IF minutes. Remove contact lenses, if presen IF exposed or concerned: Get medical atter Store locked up. Store in a corrosion resista	eye protection and face protection. Obtain special all safety precautions have been read and e. IF SWALLOWED: Rinse mouth. Do NOT induce mediately all contaminated clothing. Rinse skin with reuse. IF INHALED: Remove person to fresh air and y call a POISON CENTER or doctor. Specific IN EYES: Rinse cautiously with water for several it and easy to do. Continue rinsing. ention. ant container with a resistant inner liner.
Prevention Response Storage Disposal WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) WHMIS 2015: Physical Hazard(s) not otherwise	Wear protective gloves, protective clothing, instructions before use. Do not handle until understood. Absorb spillage to prevent material-damage vomiting. IF ON SKIN (or hair): Take off im water. Wash contaminated clothing before keep comfortable for breathing. Immediatel treatment (see information on this label). IF minutes. Remove contact lenses, if presen IF exposed or concerned: Get medical atte Store locked up. Store in a corrosion resista Dispose of container in accordance with loc	eye protection and face protection. Obtain special all safety precautions have been read and e. IF SWALLOWED: Rinse mouth. Do NOT induce mediately all contaminated clothing. Rinse skin with reuse. IF INHALED: Remove person to fresh air and y call a POISON CENTER or doctor. Specific IN EYES: Rinse cautiously with water for several it and easy to do. Continue rinsing. ention. ant container with a resistant inner liner.
Prevention Response Storage	Wear protective gloves, protective clothing, instructions before use. Do not handle until understood. Absorb spillage to prevent material-damage vomiting. IF ON SKIN (or hair): Take off im water. Wash contaminated clothing before keep comfortable for breathing. Immediatel treatment (see information on this label). IF minutes. Remove contact lenses, if presen IF exposed or concerned: Get medical atte Store locked up. Store in a corrosion resista Dispose of container in accordance with loc None known	eye protection and face protection. Obtain special all safety precautions have been read and e. IF SWALLOWED: Rinse mouth. Do NOT induce mediately all contaminated clothing. Rinse skin with reuse. IF INHALED: Remove person to fresh air and y call a POISON CENTER or doctor. Specific IN EYES: Rinse cautiously with water for several t and easy to do. Continue rinsing. ention. ant container with a resistant inner liner.

3. Composition/Information on Ingredients

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Mixture

hemical name	Common name and synonyms	CAS number	%
1,2-Ethanediol		107-21-1	7-13*
Phosphonic acid, (1-hydroxyethylidene)bis-, potassium salt		67953-76-8	1-5*
Phosphonic acid,[nitrilotris(methylene)]tris-, pentasodium salt		2235-43-0	1-5*
Potassium hydroxide		1310-58-3	0.1-1*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments	US GHS: The exact percentage (concentration) of composition has been withheld as a trade
	secret in accordance with paragraph (i) of \$1910 1200

secret in accordance with paragraph (i) of §1910.1200. *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

	4. First Aid Measures
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER o doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.
	5. Fire Fighting Measures
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of phosphorus. Oxides of nitrogen. Oxides of sulfur. Metal oxides.
	6. Accidental Release Measures
Personal precautions,	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

thods and materials for ntainment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.			
namment and cleaning up				
	Small Spills: Wipe up with absorbent m remove residual contamination.	naterial (e.g. cloth, fleece). Cle	ean surface thoroughly to	
	Never return spills to original container	s for re-use. For waste dispos	al, see section 13 of the SDS	
vironmental precautions	Avoid discharge into drains, water cours streams, ponds or public waters.	rses or onto the ground. Do n	ot discharge into lakes,	
	7. Handling and S	torage		
ecautions for safe handling	Do not breathe mist or vapor. Do not g drink. Provide adequate ventilation. Av protective equipment. Wash thoroughly handling this material.	oid prolonged exposure. Wea	r appropriate personal	
nditions for safe storage, luding any incompatibilities	Store locked up. Store in a cool, dry pla container with a resistant inner liner. Ke incompatible materials (see Section 10	eep only in the original contai	ner. Store away from	
	8. Exposure Controls/Pers	onal Protection		
cupational exposure limits				
Canada. Alberta OELs (Occ Components	upational Health & Safety Code, Sched Type	dule 1, Table 2) Value		
1,2-Ethanediol (CAS 107- 21-1)	Ceiling	100 mg/m3		
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3		
Canada. British Columbia O Safety Regulation 296/97, as Components		or Chemical Substances, Oo Value	cupational Health and Form	
1,2-Ethanediol (CAS	Ceiling	100 mg/m3	Aerosol.	
107-21-1)	g	Ū		
	OTEL	50 ppm	Vapor.	
	STEL TWA	20 mg/m3 10 mg/m3	Particulate.	
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3	Particulate.	
	eg. 217/2006, The Workplace Safety An	d Health Act)		
Components	Туре	Value	Form	
1,2-Ethanediol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.	
107-21-1)		50 ppm	Vapor fraction	
	TWA	25 ppm	Vapor fraction	
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3		
	atrol of Exposure to Biological or Cher	nical Agents) Value	Form	
Canada. Ontario OELs. (Cor Components	Туре	value	1 Olim	
		100 mg/m3	Aerosol.	
Components 1,2-Ethanediol (CAS 107-	Туре			
Components 1,2-Ethanediol (CAS 107- 21-1) Potassium hydroxide (CAS 1310-58-3)	Type Ceiling	100 mg/m3 2 mg/m3	Aerosol.	
Components 1,2-Ethanediol (CAS 107- 21-1) Potassium hydroxide (CAS 1310-58-3) Canada. Quebec OELs. (Min Components 1,2-Ethanediol (CAS	Type Ceiling Ceiling histry of Labor - Regulation Respecting	100 mg/m3 2 mg/m3 g the Quality of the Work En	Aerosol. vironment)	
Components 1,2-Ethanediol (CAS 107- 21-1) Potassium hydroxide (CAS 1310-58-3) Canada. Quebec OELs. (Min Components	Type Ceiling Ceiling histry of Labor - Regulation Respecting Type	100 mg/m3 2 mg/m3 g the Quality of the Work En Value	Aerosol. vironment) Form	

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Components	Туре	Value	Form
1,2-Ethanediol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.
Potassium hydroxide (CAS 13 3)	310-58- Ceiling	2 mg/m3	
US. ACGIH Threshold Limit	Values		
Components	Туре	Value	Form
1,2-Ethanediol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3	
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3	
logical limit values	No biological exposure limits not	ed for the ingredient(s).	
oropriate engineering Itrols	should be matched to conditions or other engineering controls to r	ly 10 air changes per hour) should Ł . If applicable, use process enclosu naintain airborne levels below reco stablished, maintain airborne levels	res, local exhaust ventilatio mmended exposure limits. I
ividual protection measures,	such as personal protective equ	ipment	
Eye/face protection	Wear safety glasses with side sh	ields (or goggles).	
Skin protection			
Hand protection	Impervious gloves. Confirm with	reputable supplier first.	
Other	Wear appropriate chemical resis	tant clothing. As required by employ	yer code.
Respiratory protection	Respirator should be selected by professional following requirement	may be exceeded, use an approve and used under the direction of a t nts found in OSHA's respirator stan adard for respiratory protection (Z88	rained health and safety dard (29 CFR 1910.134),
Thermal hazards	Not applicable.		
neral hygiene siderations		ygiene measures, such as washing or smoking. Routinely wash work c	

9. Physical and Chemical Properties

AppearanceClearAppearanceClearPhysical stateLiquid.FormLiquid.ColorPale amberOdorMildOdor thresholdNot available.pH11.5 - 12.3Melting point/freezing point14.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Flammability (solid, gas)Not applicable.Upper/lower flammability or exp:Imitial Soli.Flammability limit - lower (%)Not available.		
FormLiquid.ColorPale amberOdorMildOdor thresholdNot available.pH11.5 - 12.3Melting point/freezing point14.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Flash pointNot available.Flammability (solid, gas)Not available.Upper/lower flammability or expressionNot available.Flammability limit - lowerNot available.	Appearance	Clear
ColorPale amberOdorMildOdor thresholdNot available.pH1.5 - 12.3Melting point/freezing point14.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Flammability (solid, gas)Not available.Upper/lower flammability on explicable.Not available.Upper/lower flammability on explicable.Not available.Itamability limit - loweNot available.	Physical state	Liquid.
OdorMildOdor thresholdNot available.pH11.5 - 12.3Melting point/freezing point14.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Flammability (solid, gas)Not available.Upper/lower flammability or expressionNot available.Flammability limit - lowerNot available.	Form	Liquid.
Odor thresholdNot available.pH11.5 - 12.3Melting point/freezing point14.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Flash pointNot available.Flammability (solid, gas)Not available.Upper/lower flammability or expressionNot available.Flammability limit - lowerNot available.	Color	Pale amber
pH11.5 - 12.3Melting point/freezing point14.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Flash pointNot available.Flammability (solid, gas)Not available.Upper/lower flammability or ery=veryInitiable.Flammability limit - lowerNot available.	Odor	Mild
.Id.9 °F (-9.5 °C)Initial boiling point and boiling rangeNot available.Pour pointNot available.Pour pointNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Evaporation rate Flammability (solid, gas)Not applicable.Upper/lower flammability or expl: Flammability limit - lowerNot available.	Odor threshold	Not available.
Initial boiling point and boiling rangeNot available.Pour pointNot available.Specific gravityNot available.Specific gravityNot available.Partition coefficient (n-octanol/water)Not available.Flash pointNot available.Flash pointNot available.Evaporation rateNot available.Flammability (solid, gas)Not applicable.Upper/lower flammability or explicable.Not available.Flammability limit - lowerNot available.	рН	11.5 - 12.3
rangePour pointNot available.Pour pointNot available.Specific gravityNot available.Partition coefficientNot available.(n-octanol/water)Not available.Flash pointNot available.Evaporation rateNot available.Flammability (solid, gas)Not applicable.Upper/lower flammability or explicable.Not available.Flammability limit - lowerNot available.	Melting point/freezing point	14.9 °F (-9.5 °C)
Specific gravity Not available. Partition coefficient Not available. (n-octanol/water) Not available. Flash point Not available. Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosure limits Not available. Flammability limit - lower Not available.	•••••••	Not available.
Partition coefficient (n-octanol/water) Not available. Flash point Not available. Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Not available. Flammability limit - lower Not available.	Pour point	Not available.
(n-octanol/water) Flash point Not available. Flash point rate Not available. Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explorable. Not available. Flammability limit - lower Not available.	Specific gravity	Not available.
Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Flammability limit - lower Not available.		Not available.
Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Flammability limit - lower Not available. Not available.	Flash point	Not available.
Upper/lower flammability or explosive limits Flammability limit - lower Not available.	Evaporation rate	Not available.
Flammability limit - lower Not available.	Flammability (solid, gas)	Not applicable.
	Upper/lower flammability or exp	losive limits
		Not available.

Not available.			
Not available.			
1.090 - 1.17			
Complete			
Not available.			
Not available.			
Not available.			
Not explosive.			
Not oxidizing.			
10. Stability and Reactivity			
Reacts violently with strong acids. This product may to metals.	react with oxidizing agents. May be corrosive		
No dangerous reaction known under conditions of n	ormal use.		
Material is stable under normal conditions.			
Do not mix with other chemicals.			
Acids. Strong oxidizing agents. Oxidizing agents. Me	etals. Maleic anhydride.		
May include and are not limited to: Oxides of carbor of phosphorus.	. Oxides of nitrogen. Oxides of sulfur. Oxides		
11. Toxicological Information			
Eye, Skin contact, Inhalation, Ingestion.			
kposure			
Causes digestive tract burns. May cause stomach d	istress, nausea or vomiting.		
May cause irritation to the respiratory system. Prolo	nged inhalation may be harmful.		
Causes severe skin burns.			
Causes serious eye damage.			
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including			
cts			
Species	Test Results		
97-01) (CAS Mixture)			
Maria	05000		
Mouse	35000 mg/kg, estimated		
-			
Rat	27250 mg/m3, 4 hr, estimated		
	25 mg/L, 6 Hours, estimated		
Cat	16500 mg/kg, estimated		
Dog	55000 mg/kg, estimated		
Guinea pig	66000 mg/kg, estimated		
Human	11100 mg/kg, estimated		
Mouse	146 d/kg, estimated		
Mouse Rabbit	146 g/kg, estimated		
Mouse Rabbit Rat	146 g/kg, estimated 50000 mg/kg, estimated 332 ml/kg, estimated		
	Not available. Not available. Not available. Not available. 1.090 - 1.17 Complete Not available. Not available. Not available. Not explosive. Not oxidizing. 10. Stability and Reactivity Reacts violently with strong acids. This product may to metals. No dangerous reaction known under conditions of no Material is stable under normal conditions. Do not mix with other chemicals. Acids. Strong oxidizing agents. Oxidizing agents. Me May include and are not limited to: Oxides of carborn of phosphorus. 11. Toxicological Information Eye, Skin contact, Inhalation, Ingestion. Causes digestive tract burns. May cause stomach d May cause irritation to the respiratory system. Protor Causes severe skin burns. Causes serious eye damage. Burning pain and severe corrosive skin damage. Ca include stinging, tearing, redness, swelling, and blur blindness could result. cts Species 97-01) (CAS Mixture) Mouse Rat Cat Dog Guinea pig Human		

Compo		Species	Test Results
1,2-Eth	anediol (CAS 107-21-1)		
	Acute Dermal		
	LD50	Mouse	> 3500 mg/kg, ECHA
		Rabbit	9530 mg/kg, HSDB
	Inhalation		
	LC50	Rat	> 2.5 mg/L, 6 Hours, ECHA
			2725 mg/m3, 4 hr, HSDB
	Oral		-
	LD50	Cat	1670 mg/kg, CCID - New Zealand
			1650 mg/kg, HSDB
		Dog	> 8.8 g/kg, HSDB
			5500 mg/kg, HSDB
		Guinea pig	6600 mg/kg, CCOHS
			8.2 g/kg, HSDB
		Human	1110 - 1665 mg/kg, HSDB
		Mouse	14.6 g/kg, HSDB
		Rabbit	5000 mg/kg, CCOHS
		Rat	
		Nat	> 10000 mg/kg, ECHA
			7712 mg/kg, ECHA
D			5.9 g/kg, HSDB
Phosph	ionic acid, (1-hydroxyethylide Acute	ene)bis-, potassium salt (CAS 67953-76-8)	
	Dermal		
	LD50	Not available	
		Rabbit	> 5000 mg/kg, 24 Hours, ECHA
	Inhalation		
	LC50	Not available	
	Oral		
	LD50	Rat	2850 mg/kg, ECHA
Phosph		ne)]tris-, pentasodium salt (CAS 2235-43-0)	
	Acute		
	<i>Dermal</i> LD50	Rabbit	> 15800 mg/kg, RTECS
	Inhalation		
	LC50	Not available	
	Oral		
	LD50	Duck	> 2510 mg/kg, RTECS
		Quail	> 2510 mg/kg, RTECS
		Rat	17800 mg/kg, RTECS
Potassi	um hydroxide (CAS 1310-58		
	Acute		
	Dermal		
	LD50	Not available	
	Inhalation		
	LC50	Not available	
	Oral	Pat	
	LD50	Rat	388 mg/kg, ECHA
			365 mg/kg, ECHA
			333 mg/kg, ECHA
			273 mg/kg

Skin corrosion/irritation	Causes sev	vere skin burns and eye dam	age.			
Exposure minutes	Not availab	le.				
Erythema value	Not availab	le.				
Oedema value	Not availab	le.				
Serious eye damage/eye irritation	Causes ser	ious eye damage.				
Corneal opacity value	Not availab	le.				
Iris lesion value	Not availab	ot available.				
Conjunctival reddening value	Not availab	le.				
Conjunctival oedema value	Not availab	le.				
Recover days	Not availab	le.				
Respiratory or skin sensitization	n					
Canada - Alberta OELs: Irrit	tant					
1,2-Ethanediol (CAS 107	,	Irritant				
Potassium hydroxide (CA	,					
Respiratory sensitization	•	ratory sensitizer.				
Skin sensitization	•	t is not expected to cause sl				
Mutagenicity		allable to indicate product or or genotoxic.	any components present at greater than 0.1% are			
Carcinogenicity	See below.	0				
US. OSHA Specifically Reg	ulated Substa	ances (29 CFR 1910.1001-1	050)			
Not listed.			,			
Reproductive toxicity	May damag	e fertility or the unborn child				
Teratogenicity	Not availab	le.				
Specific target organ toxicity - single exposure	Not classifie	ed.				
Specific target organ toxicity - repeated exposure	May cause	damage to organs through p	rolonged or repeated exposure.			
Aspiration hazard	Not an aspi	ration hazard.				
Chronic effects	Prolonged i	nhalation may be harmful.				
		12. Ecological Infor	mation			
Ecotoxicity	See below					
Ecotoxicological data						
Components		Species	Test Results			
1,2-Ethanediol (CAS 107-21-1)						
Crustacea	EC50	Daphnia	46300 mg/L, 48 Hours			
Aquatic						
Fish	LC50	Fathead minnow (Pimep	hales promelas) 8050 mg/L, 96 hours			
Potassium hydroxide (CAS 1310-	58-3)					
Aquatic						
Fish	LC50	Western mosquitofish (C	Sambusia affinis) 80 mg/L, 96 hours			
Persistence and degradability	No data is a	available on the degradability	of this product.			
Bioaccumulative potential	No data ava	ailable.				
Mobility in soil	No data ava	ailable.				
Mobility in general	Not availab	le.				
Other adverse effects			(e.g. ozone depletion, photochemical ozone creation			
	potential, e		arming potential) are expected from this component.			
		13. Disposal Conside	erations			
Disposal instructions		•	l containers at licensed waste disposal site. Dispose of ocal/regional/national/international regulations.			
Local disposal regulations	Dispose in	accordance with all applicab	le regulations.			
Hazardous waste code		code should be assigned in a	2 or =>12.5, or corrosive to steel] discussion between the user, the producer and the waste			
		Page: 7 of 10	Issue date 07-December-2021			
			7507-05 7507-P3 7507-01 (Canada/US CHS)			

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Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).		
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.		
	14. Transport Information		
Transport of Dangerous Goods TDG) Proof of Classification	Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.		
U.S. Department of Transportation	ion (DOT)		
Basic shipping requirement	ts:		
UN number	UN3266		
Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s.		
Technical name	Potassium hydroxide		
Hazard class	8		
Packing group Special provisions	II 386, B2, IB2, T11, TP2, TP27		
Packaging exceptions	154		
Packaging non bulk	202		
Packaging bulk	242		
Transportation of Dangerous G	oods (TDG - Canada)		
Basic shipping requirement	ts:		
UN number	UN3266		
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.		
Technical name	Potassium hydroxide		
Hazard class	8		
Packing group Special provisions	ll 16		
DOT	10		
CORROSIVE 8			
rDG			
	15. Regulatory Information		
Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.		
Canada Priority Substances	s List (Second List): Listed substance		
1,2-Ethanediol (CAS 107			
Export Control List (CEPA	1999, Schedule 3)		
Not listed.			
Greenhouse Gases			
Not listed.			

Not listed. Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions

Not applicable

TSCA Section 12(b) Export	Notification (40 CFR 707, Su	hnt D)		
All chemicals used are o	,	spri 2)		
CERCLA Hazardous Substa				
1,2-Ethanediol (CAS 107	· · /	Listed.		
Potassium hydroxide (CA		Listed.		
	ulated Substances (29 CFR 1	910.1001-1050)		
Not listed.				
Superfund Amendments and Re	•	ARA)		
Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes			
	Fire Hazard - No			
	Pressure Hazard - No Reactivity Hazard - No			
SARA 302 Extremely	No			
hazardous substance				
SARA 311/312 Hazardous	No			
chemical				
SARA 313 (TRI reporting)				
Chemicalname 1,2-Ethanediol		CASnumber 107-21-1	<u>%bywt.</u> 7-13*	
Other federal regulations		107-21-1	7-10	
•	n 112 Hazardous Air Pollutan	te (HAPe) jet		
1,2-Ethanediol (CAS 107				
	n 112(r) Accidental Release P	Prevention (40 CFR	68.130)	
Not regulated.				
US state regulations	See below			
US - California Hazardo	ous Substances (Director's):	Listed substance		
1,2-Ethanediol (CAS		Listed.		
Potassium hydroxide	e (CAS 1310-58-3) Safety Act: Listed substance	Listed.		
1,2-Ethanediol (CAS	•			
Potassium hydroxide				
•	porting: Listed substance			
1,2-Ethanediol (CAS Potassium hydroxide		Listed. Listed.		
US - Minnesota Haz Su		Listeu.		
1,2-Ethanediol (CAS	S 107-21-1)	Listed.		
Potassium hydroxide		Listed.		
	Substances: Listed substan	ce		
1,2-Ethanediol (CAS Potassium hydroxide				
-	ening Levels: Listed substa	nce		
1,2-Ethanediol (CAS		Listed.		
Phosphonic acid,[nit pentasodium salt (C	rilotris(methylene)]tris-,	Listed.		
Potassium hydroxide		Listed.		
	ical of High Concern to Child	dren: Listed substa	nce	
1,2-Ethanediol (CAS				
US. Massachusetts RTI				
1,2-Ethanediol (CAS Potassium hydroxide				
	and Community Right-to-Kr	now Act		
1,2-Ethanediol (CAS	,			
•	er and Community Right-to-	Know Law		
1,2-Ethanediol (CAS Potassium hydroxide				
US. Rhode Island RTK				
1,2-Ethanediol (CAS	S 107-21-1)			
Υ.				

US. California Proposition 65

WARNING: This product can expose you to chemicals including ethylene glycol (ingested), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

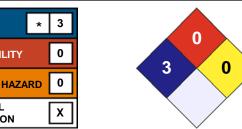
1,2-Ethanediol (CAS 107-21-1) Listed: June 19, 2015

Inventory status

Country(s) or region	Inventory name On inv	ventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)		

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0



Disclaimer

Issue date Version # Effective date

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.
07-December-2021
Nu-Calgon Technical Service Phone: (314) 469-7000

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

Prepared by Other information